



City of Columbia
Electric Generation and Emissions in 2011

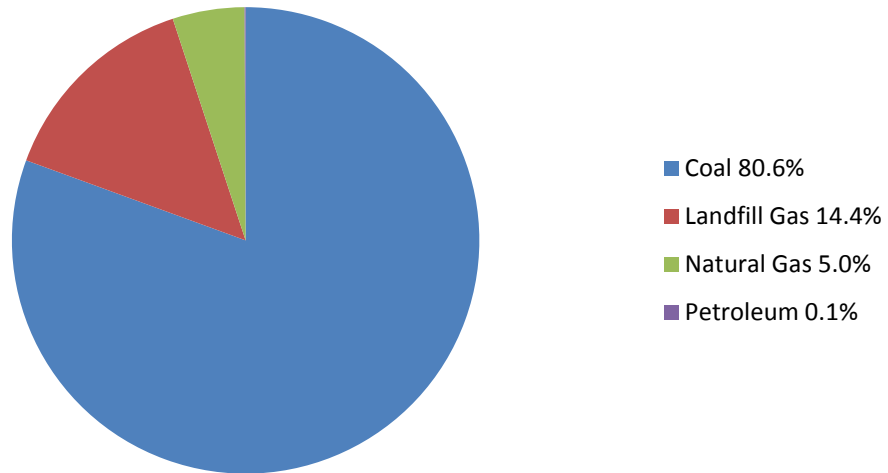
Generation Tables

	Fuel Consumption, MMBTUs	Percent of Total		Net Electric Power Generated, MWh	Percent of Total	
Non-renewable sources						
Coal	976,019	93.2%	83.5%	76,595	94.1%	80.6%
Natural Gas	70,136	6.7%	6.0%	4,728	5.8%	5.0%
Petroleum	620	0.1%	0.1%	69	0.1%	0.1%
Nuclear						
Other						
Non-renewable total	1,046,775	100.0%	89.5%	81,392	100.0%	85.6%
Renewable sources						
Biomass						
Hydroelectric						
Landfill Gas	122,426	100.0%	10.5%	13,667	100.0%	14.4%
Solar						
Waste Fuels						
Wind						
Wood						
Renewable total	122,426	100.0%	10.5%	13,667	100.0%	14.4%
Grand total	1,169,201		100.0%	95,059		100.0%

Fuel Type	Physical Units	Number of Units
Anthracite Coal and Bituminous Coal	Short Tons	38,404
Natural Gas	MCf	70,136
Distillate Fuel Oil	Barrels	107
Landfill Gas	MCf	306,067



Net Generation by Fuel Type, 2011 for City of Columbia





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Power Plant Nameplate information for City of Columbia

Plant Name	County Location	Nameplate Capacity (MW)
<i>City of Columbia</i>		565.2
Columbia	Boone	402.4
Columbia Energy Center	Boone	162.8



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Emissions from Electricity Generated in 2011: City of Columbia

	CO2 Equivalent (TONS)	Carbon Dioxide (CO2) (TONS)	Methane (CH4) (TONS)	Nitrogen Dioxide (NO2) (TONS)
<i>City of Columbia</i>	3,713,777	436,564	49,193	7,239
Columbia	3,707,117	433,202	49,130	7,233
Columbia Energy Center	6,660	3,362	63	6

	Sulfur Dioxide (SO2) (TONS)	Annual Nitrogen Oxide (NOx) (TONS)	Summer Nitrogen Oxide (NOx) (TONS)
<i>City of Columbia</i>	1,899	0.0000	0.0000
Columbia	1,899	0.0000	0.0000
Columbia Energy Center	0	0.0000	0.0000



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Identified Flue Gas Desulfurization (FGD) controls installed on plants operated by City of Columbia

Plant	Control Equipment	Sorbent Type
	No FGD Controls Installed	

Identified Flue Gas Particulate (FGP) controls installed on plants operated by City of Columbia

Plant	Control Equipment
Columbia	Baghouse, reverse air

Notes:

Generation, emissions and pollution control data include power plants owned by the utility and located in Missouri.

Emissions data calculated by Missouri Department of Natural Resources, Division of Energy, from EIA Fuel Consumption Data

Fuel Consumption and Generation Data from United States Energy Information Administration, Form 923, United States Department of Energy
<http://www.eia.gov/electricity/data/eia923>

Pollution control data (FGD and FGP equipment) from United States Energy Information Administration, Form 860, United States Department of Energy
<http://www.eia.gov/electricity/data/eia860/index.html>

Emissions factors for fuel-based generation from United States Environmental Protection Agency "Emission Factors for Greenhouse Gas Inventories", November 7, 2011,
<http://www.epa.gov/climateleadership/documents/emission-factors.pdf>